

## REMARKS

This Amendment and Response is believed to be fully responsive to the Office Action mailed September 27, 2004. In that Action: claims 1, 19, and 29 were objected to because of claim informalities; claim 12 was rejected under 35 U.S.C. §112, first paragraph; claims 1, 4, 10, 13-15, 20, 21, 24-27, and 33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Utsumi (USPN 5, 729, 281) in view of Bigham (USPN 5, 740, 075); claims 2 and 3 were rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Chen (USPN 5,699,105); claim 5 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Rakib (US Pat. Pub. No. 2002/0019984); claim 6 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Dunn (USPN 5,721, 829); claim 7 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Fries (USPN 6,317,885); claims 8, 9, and 19 were rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Nikolich (US Pat. Pub. No. 2002/0073431); claim 11 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Ahmed (USPN 6,519,773); claim 12 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and DeRodeff (USPN 5,828,403); claim 16 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, Chen, and an article in IEEE Communications Magazine; claims 17 and 18 were rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Kitamura (USPN 6,188,871); claim 22 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and Wunderlich (USPN 5,631,693); claim 23 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, and McGowan (US Pat. Pub. No. 2003/0018745); claims 28, 29, and 31 were rejected under §103(a) as being

unpatentable over the combination of Utsumi, Bigham, and Decker (USPN 6,009,465); claim 30 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, Decker, and Shekel (USPN 3,639,840); and claim 32 was rejected under §103(a) as being unpatentable over the combination of Utsumi, Bigham, Decker, and Hoarty (USPN 5,220,420).

Three different paragraphs in the specification have been amended. Claim 12 has been cancelled. New dependent claims 34-36 have been added. Claims 1, 19, 26, 29, and 33 have been amended. Claim 19 was amended to correct a typographical error. Claim 29 was amended to address an antecedent basis issue. Claims 1, 26, and 33 were amended to further distinguish over the prior art of record. Support for the amendments to claims 1, 26, and 33 and for new dependent claims 34-36 can be found in the specification at page 25, line 9 through page 27, line 7.

7. Reconsideration of the rejected claims is hereby requested.

Each of the independent claims (1, 26, and 33) has been rejected over the combination of Utsumi and Bigham. Utsumi appears to disclose a cable television system in which a channel selection signal is transmitted from a subscriber device to a selective distribution station, so that the selective distribution station can select the selected channel from an all-channel signal that it receives from the center station. The selective distribution station then provides the selected channel to the subscriber device. Bigham appears to disclose an access subnetwork controller for video dial tone networks. The system includes a broadcast headend node that receives an OC-48 signal from a broadcast ring.

Each of independent claims 1 and 33, as amended, contain the following limitations that are not found in Utsumi, Bigham, or any of the other cited art: wherein a customer can provide a channel change request to the service module via the interface unit and, in response thereto, the service module commands the frequency converter corresponding to the particular interface unit

associated with the customer to convert the video channel containing the requested channel to the predetermined frequency; and further wherein if the requested channel is not one of those currently contained in the multiplexed channel signal sent from the headend to the particular service module associated with the customer, the headend is requested to arrange for the requested channel to be provided in the multiplexed channel signal sent from the headend to the particular service module associated with the customer.

In particular, it is believed that none of the cited prior art discloses or suggests requesting the headend to arrange for a requested channel to be provided in a multiplexed channel signal sent from the headend to a service module so that the service module can provide that requested channel from the multiplexed channel signal to the interface unit from which the request came. Because this limitation is neither disclosed nor suggested in the prior art, it is respectfully believed that each of the independent claims (1 and 33) are patentable and that each of the claims dependent thereon (claims 2-11, 13-25, and 34-35) are patentable as well.

Similarly, independent claim 26, as amended, contains the following limitations that are not found in Utsumi, Bigham, or any of the other cited art: wherein only a subset of the video channels available to the headend are placed in any given multiplexed channel signal, the subset being determined by which channels are requested via the interface units associated with the service module receiving that multiplexed channel signal. It is believed that the prior art discloses only systems where the signal sent from the headend to intermediate service points such as the claimed service module includes each video channel available to the headend. Instead, the present invention allows for a headend to receive hundreds or even thousands of channels that it can selectively supply to customers without the need to provide a multiplexed signal containing all of those channels to the intermediate service point or to the customer's premises. Since all the

channels are not sent, (1) it is not necessary to provide a high bandwidth communication link between the headend and the intermediate service point, (2) the intermediate service point does not need to be upgraded, serviced, or re-programmed each time the headend is upgraded to add more available channels, and (3) it is less desirable for a cable pirate to pick-off the multiplexed channel. For all of these reasons, it is believed that claim 26 and the claims dependent thereon, claims 27-32 and 36, are patentable.

Based upon the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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